

IOT Automation & ITSM Services - 2023

Automation Team

Who We Are: A 5-person Automation & DevOps team supporting internal IOT system, service, and/or process “automation”.

Our Mission: To support and create efficiencies in the services IOT offer to the State of Indiana.

Department: 493031

Manager: John Toole – IT Director of Automation & ITSM Support

What We Do:

IOT Automation assists the Indiana Office of Technology in its mission of providing better IT services for its customers. We do this by assisting our internal teams with system, service, and process improvements through various automation services and API interfaces. We champion source control standards, efficiency, and security via automated testing and deployment (CI/CD pipelines) using industry standard project management frameworks. We develop complex scripting solutions and assist in design, implementation and flow of larger automation project and systems for the State of Indiana. The automation team is also the lead on data collections for core IOT internal services such as IT service billing and IOTData.

Our Products:

System/Service/Process automation scripts and workflows
Server Lifecycle automation
“Day 2” Operation automation
Infrastructure automation
Catalog based on-demand self-service automation
API automation (Administration and reporting)
Automation job management platforms (Jenkins, Azure Automation, Power Automate, Microsoft Task Manager, CRON)
Core flow for; Billing collection data, IOTData, Server Data, Archer data, PowerBI (D3P, IOT Transparency Portal)
CAA Provisioning flows (for Office 365 products and licensing), and post CAA deprovisioning cleanup
IOT Proget Services
IOT PowerShell Module standardization and catalog

Our Tools:

Project Management Framework	DevOps CI/CD, Agile with defined sprints
Azure DevOps (ADO)	Code repositories, Code reviews, Pipelines, ADO Boards
VMWare vRA/vRO	Automation catalogs and design
Jenkins	Open-source automation services platform
Service API	REST, Soap, custom CLI
Platform Scripting and Shell	Powershell, BASH/ZSH/SJ, Azure CLI, AWS CLI, Java script, VB script, batch
Databases	Microsoft Active Directory, Azure Active Directory, Microsoft SQL, Oracle DB

Our Customers: IOT

Current Projects:

- Automation backend modernization, optimization and security hardening
- Automation (internal administrative and customer facing) portal framework initialization
- Billing process and collection modernization
- DevOps framework initialization (Containerization, “Services” AsCode, Pipelines)

ITSM Support Team

Who We Are: A three-member team supporting the state-wide ITSM System.

Our Mission: *Support the cloud based ITSM system (ASM application) and optimize/automate manual (and new) process.*

Formed: January 2016

What We Do:

Service Transition

Transition Planning & Support Upgrade & maintain the ITSM System (ASM). Used by 24 agencies.
Evaluate and implement new applications.

Service Asset & Conf Mgt. Manage the CMDB (71K user accounts, 50K computers, 3K bill codes via AD, SCCM & in-house)
Next? 4.2K servers, 4K certs, 20K network devices, 15K desk/IP phones, 3K databases, 1,700 apps.

Knowledge Mgt Maintain ~700 SOPs, ~50 FAQs, the ITSM Workers Guide, and many other Reference Guides.

Service Operation

Incident Management Develop processes to restore service to the customer as quickly as possible, often initially through a workaround or temporary fix before developing a permanent solution. Includes managing the Breach Management process. IOT averages 4,250 Tickets/mo.

Request Management Develop processes and workflows to automate the request for services and processes.
130 available.

Problem Management Develop processes to minimize the number and severity of incidents and potential problems to the business/organization. Reduce the Impact of incidents and problems that are caused by errors within the IT infrastructure, prevent recurrence of incidents related to these errors.

Self-Service Portal Develop/support the SSP.
~2,250 users/mo., 17 agencies posting info, 250+ service actions available.

Continual Service Improvement

Quality Control Report and remediate issues in which inter-group procedures are not followed. Review and enhance procedures, policies, and tools when appropriate.

Customer Sat Mgt Survey, report and remediate customer issues with IOT services and procedures.
Review and enhance procedures based on customer feedback.

Our Products:

ITSM Work Mgt Alemba Service Manager (ASM) Work Management System.

ITSM Workflow Dev Develop service requests and workflows to automate and improve manual processes.

Our Metrics: IOT's Core Delivery Services Level metrics.

Our Customers: State agencies (~100) that use any of the 130 products or services provided by IOT.

Major Accomplishments:

- Moved vFire from on-site to the cloud (ASM).
- Moved ASM to Azure.
- Automated the ITSM QC & Cust Sat processes.
- Created and manage the Breach Management Program.
- Created the IOT ITSM-ITIL Roadmap.
- Developed the Knowledge Mgt / SOP creation process.
- Incident Management – implemented in vFire.
- Developed the CMDB in ASM.
- Created over 250 service offerings in the Portal

Current Projects:

- Adding new BMV department to cover all branches.
- Updating AOS use of ASM to better fit their business needs after consolation to IOT late last year.
- Update IDEM use of ASM to better fit current business practices.
- Upgrading ASM to current version.